The Challenge

Across Canada, an estimated 800,000 Canadians live with chronic obstructive pulmonary disease (COPD), a progressive disease characterized by debilitating breathlessness. This population is among the highest users of hospital care. Of all chronic diseases, COPD is the number one reason for hospitalizations, accounting for the largest number of return visits to emergency departments (EDs) and the highest volume of hospital readmissions. Often, patients end up seeking care in the ED to manage their chronic illnesses because more appropriate care isn’t available in the community. The situation is expected to worsen as one-in-four Canadians is set to develop the disease in their lifetime.

In 2014, the Canadian Foundation for Healthcare Improvement partnered with Boehringer Ingelheim (Canada) Ltd. on INSPIRED Approaches to COPD, a pan-Canadian quality improvement collaborative that provided funding, training, coaching and resources for a network of 19 interprofessional teams from healthcare organizations across Canada. Through this collaborative, the teams adapted, adopted and evaluated the INSPIRED COPD Outreach Program™, a coordinated, proactive approach to improving care for people with COPD and supporting their caregivers.

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The first challenge the team faced was to identify individuals living with moderate to severe COPD in the community in order to enrol them in the initiative. The team knew that clients were out there – hospital admissions for COPD had increased over the three years leading up to 2014-15 and patients with increasingly complex needs were being discharged home. But the Home Living program’s existing electronic medical record was unable to assist in tracking clients by their diagnoses.

A second challenge was the lack of a standardized, integrated and collaborative model of care in the home living program. Clients were being cared for in the community, but each practitioner approached care of these individuals with their own tool kit of knowledge and skills. As well, case managers, traditionally nurses who have access to other professional services, are the contact point for clients. But respiratory health is not the case managers’ speciality and so they often lacked the expertise to, for example, distinguish mild from serious COPD, address crisis dyspnea, and engage in COPD education.
THE SOLUTION

Teams participating in the INSPIRED collaborative identified patients or clients with advanced COPD, and then invited them into a supportive program that provided them with: a written action plan for managing their disease; a phone call after they were discharged home; at-home self-management education and psychosocial support; and advance care planning when needed. Patients in the program were also given a telephone number to call for support.

Using a population health approach of active case finding, the AHS team began by enrolling a particularly vulnerable client population living in a low-income pocket in northeast Edmonton. These clients were high users of ED and acute care (AC). They were also socially isolated and homebound.

In the fall of 2014, supported by the CFHI quality improvement collaborative, a small working group of advanced practitioners and project staff began meeting weekly to begin literature scans, engage stakeholders, develop process maps – diagrams that illustrate how care is currently delivered – consent forms, standards of care, and educational materials in preparation for a January 2015 launch. Most of the team, as well as nurse practitioners in the Home Living program, also took COPD training to better understand the best evidence-based options for treatment and management of the disease.

The active case finding process was labour intensive but helped identify people living with advanced COPD by examining discharge reports for high users of ED and AC by clients in the Home Living program. Soon after, referrals came from community partners who were aware there were clients on their caseloads who would benefit from the INSPIRED COPD approach in their homes.

The team enrolled a cohort of 50 clients over a six-month period into the INSPIRED COPD initiative: 27 from the targeted northeast Edmonton neighbourhood, and 23 from other parts of the city.

Each client’s diagnosis was confirmed: 13 individuals had evidence on record to support their diagnosis and the remainder were confirmed by in-depth chart reviews by a respirologist and the project lead.

By the January 2015 launch of the INSPIRED initiative, the Home Living team had trained 10 staff as COPD educators. An additional 18 staff took this training over the following year, resulting in 28 direct care providers receiving this education as part of CFHI’s agreement — this would be an investment in the philosophy of “paying it forward” for clients and caregivers for years to come.

AHS INSPIRED team members made home visits to clients, providing education about COPD and helping clients develop action plans so they could better manage their condition at home and avoid unnecessary hospital visits. Clients had access to telephone support when their conditions worsened, receiving support in the community rather than relying heavily upon hospital services. As well, their medications were reviewed and team members held conversations with clients and (when they had one) their family or informal caregiver about advanced care planning and documentation.

Fully 92 percent of the total participants were homebound; the other eight percent had either an informal caregiver who could help them get out, or they had (and could afford) a motorized scooter.

As well, the team also completed risk assessments on the 18 informal caregivers’ who were identified by clients and, when appropriate, made referrals for extra care and counselling for them through the Home Living program.

THE RESULTS

Seventy-seven acute exacerbations of COPD (sudden worsening of symptoms that typically lasts several days) experienced by individuals in the INSPIRED cohort, which previously would have been treated in hospital, were managed in the community for clients by the team through the use of action plans, antibiotics and oral steroids.

Support from the project team was crucial to that result since more than half (64 percent) of the 50 participants lived alone and “could hardly even prepare food or dress themselves,” said Paula Bodnarek, a nurse practitioner on the team.

Bucky Stochinsky, 83, is one of the minority of clients who does not live alone – his wife Donna is his informal caregiver. He had suffered from COPD for more than a decade, and was in and out of hospital five times in the year before he enrolled in the INSPIRED COPD program. Since then he has,
Home care team in Edmonton finds that providing COPD education and support for clients in the community is a marathon worth running.

Eight of the participants were still active smokers, but they all refused offers to enroll in a smoking cessation program, stating that smoking was one of their last, independent activities.

Thirteen of the 50 participants died during the formal reporting period. This speaks to the vulnerability of the population and the instability of their medical conditions; clients had multi-morbidity and social complexities well beyond a diagnosis of COPD, and many had sensory and/or cognitive issues, noted team leader Coral Paul. "We found out early on that we couldn't go in and then just opt out. We were in for the long haul with these clients."

Home care, as James Prevost, Professional Practice Lead for the Registered Respiratory Therapists in Home Living and a member of the INSPIRED COPD team said, "is a marathon – not a sprint."

Many of the participants had a family physician on record but were unable to access them in a timely manner and few of the physicians provide home visits. This speaks not only to the complexity of the INSPIRED COPD population, but also to a healthcare system developed over many years on the belief that clients would be able to come to the system for care, rather than partnering with isolated and vulnerable populations in the community. A learning from the INSPIRED COPD initiative in Edmonton was that nurse practitioners (NPs), with their advanced practice skills and expertise, soon became primary healthcare providers for these high-risk and homebound COPD clients, extending the INSPIRED model far beyond the seven to 10 home visits and phone calls to ongoing transdisciplinary care with a champion respirologist, RRTs, case managers, and a host of other allied health professionals. This approach was unique to Edmonton and has been incorporated into their sustainability plans.

**SUSTAINABILITY AND SPREAD**

The Home Living team has continued to enrol clients, and by October 2016 almost 200 additional clients with advanced COPD and other complex respiratory conditions were enrolled in the program. The advocacy for clients with other advanced respiratory conditions enrolled stemmed from the knowledge that as the INSPIRED COPD Initiative was occurring many other clients were in need of similar care. These clients still had their need addressed by the team but outside of the INSPIRED work, and care pathways and referrals have now been broadened to include all such clients.

The education of Home Living staff in assessing and supporting clients with COPD is continuing and the team has developed a series of tools to help identify and support clients living in the community with advanced respiratory conditions. These include: a screening tool embedded in the organization's electronic records, so case managers can identify the degree of breathlessness of COPD clients; a visit checklist that is also embedded; a homebound assessment tool to determine the need of in-home services; documentation guidelines; and a complex respiratory consultation referral form.

Increasingly, the team is getting referrals from respirologists, pulmonary units in acute care facilities, out-patient departments and Edmonton's palliative care team and consultants. The team sees future opportunities to explore partnerships and protocols for in-home palliative care for COPD patients.

The team has made numerous presentations about their experiences to groups across Alberta and Canada. Opportunities for scale, spread and sustainability are ongoing within the Continuing Care Programs in the Edmonton Zone and will involve the Palliative Care, Supportive Living, and Facility Living Streams. Additionally, it is proposed that EMS will partner with the teams through their Assess, Treat and Refer Program which is receiving attention across Alberta and Canada.